

# Work Order ID 68408

Tuesday, April 12, 2011 3:39:04 PM



PRELIMINARY ISSUE

Item ID: D4370-043

Accept



Setup Start



Revision ID: PRELIM

Item Name: Aft Wearplate Assembly

Stop



Start Date: 4/12/2011 Start Qty: 1.00



Cust Item ID:

Required Date: 4/15/2011 Req'd Qty: 1.00

Customer:



Reference:

Approvals:

Process Plan:

*Handwritten signature*

Date: 4-10-12

Tooling:

Date:

QC:

Date:

SPC (Y/N):

Date:

Run Start



Stop



Sequence ID/  
Work Center ID

Operation  
Description

Set Up/  
Run Hours

Tool ID

Tool #

Plan  
Code

Accept  
Qty

Reject  
Qty

Reject  
Number

Insp.  
Stamp

Draw Nbr

Revision Nbr

D4370

PA1

100

0.00



Waterjet

FLOW CNC Waterjet

304.050

Memo

1-Cut as per Dwg (D4370-3)

Dwg Rev: PA1

Prog Rev: PA1

2-Deburr if necessary

110

QC2- Inspect parts off machine FAI/FAIB

0.00



QC

Quality Control

Memo

0.00

SCRAP

Scrap

FB11-4-19

①

FB11-4-19

W/O:		WORK ORDER CHANGES						
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector	

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

**Work Order ID 68408**

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Approvals: Process Plan: \_\_\_\_\_ Date: \_\_\_\_\_ Tooling: \_\_\_\_\_ Date: \_\_\_\_\_

Run Start



QC: \_\_\_\_\_ Date: \_\_\_\_\_ SPC (Y/N): \_\_\_\_\_ Date: \_\_\_\_\_

Stop

Sequence ID/  
Work Center IDOperation  
DescriptionSet Up/  
Run Hours

Tool ID

Tool #

Plan  
CodeAccept  
QtyReject  
QtyReject  
NumberInsp.  
Stamp

120

QC8- Inspect parts - second check

0.00 - inspected to PA1



QC

Memo

0.00

Quality Control

Dug only

Sulcatig



130

Form as per dwg

0.00



Brake NC

Memo

0.00

Brake NC

SB 1160420



140

QC5- Inspect part completeness to step on W/O

0.00



QC

Memo

0.00

Quality Control

W/O:		WORK ORDER CHANGES						
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Page 3

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Customer:

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Approvals: Process Plan: \_\_\_\_\_ Date: \_\_\_\_\_ Tooling: \_\_\_\_\_ Date: \_\_\_\_\_

Run Start



QC: \_\_\_\_\_ Date: \_\_\_\_\_ SPC (Y/N): \_\_\_\_\_ Date: \_\_\_\_\_

Stop

Sequence ID/  
Work Center IDOperation  
DescriptionSet Up/  
Run Hours

Tool ID

Tool #

Plan  
CodeAccept  
QtyReject  
QtyReject  
NumberInsp.  
Stamp

150

0.00



Large Fab

Memo

0.00

Large Fab

1- on D4371-3, fill cut outs with hardcoat welding rod as per dwg D4370

\*\*DT9756\*\*

2059 B Hardcoat Welding Rod

BATCH#: \_\_\_\_\_

2-weld D4371-3 to wearplate by positioning holes together as per dwg D4370

304 S.S. Welding Rod

BATCH #: \_\_\_\_\_

3-Transfer drill holes in bar

160

QC9- Inspect visual per QSI004- Fusion Welds

0.00



QC

Memo

0.00

Quality Control

POSITIVE RECALL

EFFECTIVE 11.24.13 AUTH W

RELEASED \_\_\_\_\_ DATE \_\_\_\_\_

PD 2382

W/O:		WORK ORDER CHANGES						
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector	

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Page 4

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Customer:

Reference:

Approvals: Process Plan: \_\_\_\_\_ Date: \_\_\_\_\_ Tooling: \_\_\_\_\_ Date: \_\_\_\_\_

Run Start



QC: \_\_\_\_\_ Date: \_\_\_\_\_ SPC (Y/N): \_\_\_\_\_ Date: \_\_\_\_\_

Stop



Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
170 	QC5- Inspect part completeness to step on W/O	0.00							
QC Quality Control	Memo	0.00							
180 	Small Fab	0.00							
Small Fab	Memo 1- After finish, coat entire top (concave) surface as per note 10 on sheet 2 dwg D4370.	0.00							
190 	QC5- Inspect part completeness to step on W/O	0.00							
QC Quality Control	Memo	0.00							

W/O:		WORK ORDER CHANGES						
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Customer:

Reference:

Approvals: Process Plan: \_\_\_\_\_ Date: \_\_\_\_\_ Tooling: \_\_\_\_\_ Date: \_\_\_\_\_

Run Start



QC: \_\_\_\_\_ Date: \_\_\_\_\_ SPC (Y/N): \_\_\_\_\_ Date: \_\_\_\_\_

Stop



Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
200	Identify as per dwg & Stock Location: _____	0.00							
	Packaging	Memo							
	Packaging								
210	QC21- Final Inspection - Work Order Release	0.00							
	QC	Memo							
	Quality Control								

W/O:		WORK ORDER CHANGES						
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector	

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**NOTE:** Date & initial all entries

# Picklist Print

Tuesday, April 12, 2011 3:39:11 PM

Page 1

Work Order ID: 68408



Parent Item: D4370-043



Parent Item Name: Aft Wearplate Assembly


Start Date: 4/12/2011

Required Date: 4/15/2011

Start Qty: 1.00

Required Qty: 1.00

Comments: IPP Rev:A 11.04.12 new issue DD verf:EC

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
M304S18GA  304/316 .050 Sheet		Purchased	No			100	sf	204.0000	2.162	2.275789			



11-4-19

Location

Loc Qty

Loc Code

MAT020

204

111743

1

112178

4

113062

18

116135

48

116604

37

116979

96

116138

D4371-3

Manufactured No

150

Each

0.0000

1

1



Bar

W/O:		WORK ORDER CHANGES						
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector	

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

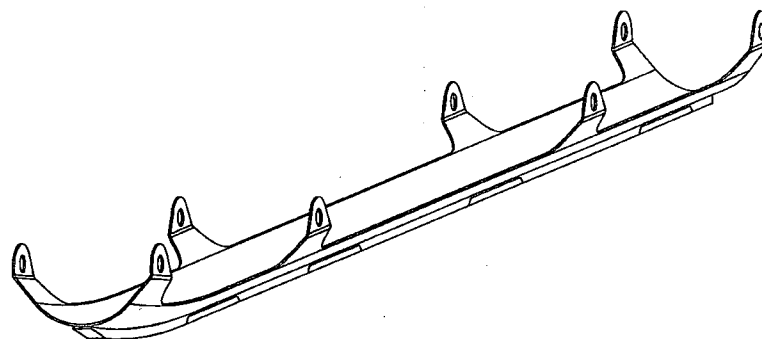
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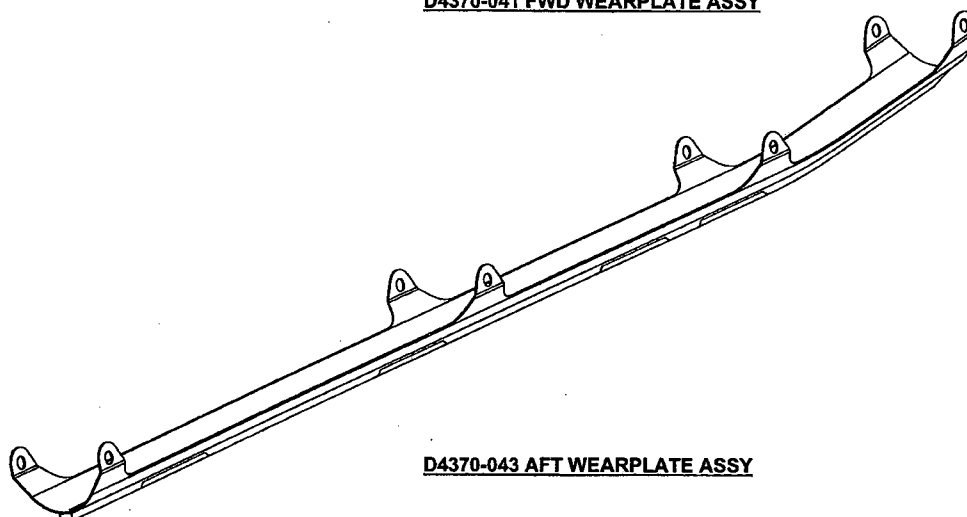
NOTE: Date & initial all entries

8 7 6 5 4 3 2 1

ITEM	QTY -041	QTY -043	PART NUMBER	DESCRIPTION
	X		D4370-041	FWD WEARPLATE ASSY
		X	D4370-043	AFT WEARPLATE ASSY
1	1		D4370-1	PLATE
2		1	D4370-3	PLATE
3	1		D4371-1	BAR
4		1	D4371-3	BAR
5	A/R	A/R	2059B	HARDCOAT
6	A/R	A/R	ROCKGUARD 4714	SEALANT



**D4370-041 FWD WEARPLATE ASSY**



**D4370-043 AFT WEARPLATE ASSY**

SHOP COPY  
RETURN TO  
ENGINEERING  
UNCONTROLLED COPY  
SUBJECT TO AMENDMENT  
WITHOUT NOTICE  
WORK ORDER  
NO. 68408

*2/11-04/12*  
**PRELIMINARY  
ISSUE**

PA1	NEW ISSUE	SC	11.03.24
REV.	DESCRIPTION	BY	DATE
DESIGN	SC	<b>DART AEROSPACE USA, INC.</b> PORT HADLOCK, WA	
DRAWN	SC		
CHECKED		DRAWING NO. D4370	REV. PA1 SHEET 1 OF 5
MFG. APPR.		TITLE WEARPLATE ASSY	SCALE NTS
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DE APPR.			
DATE	11.03.24		

8 7 6 5 4 3 2 1

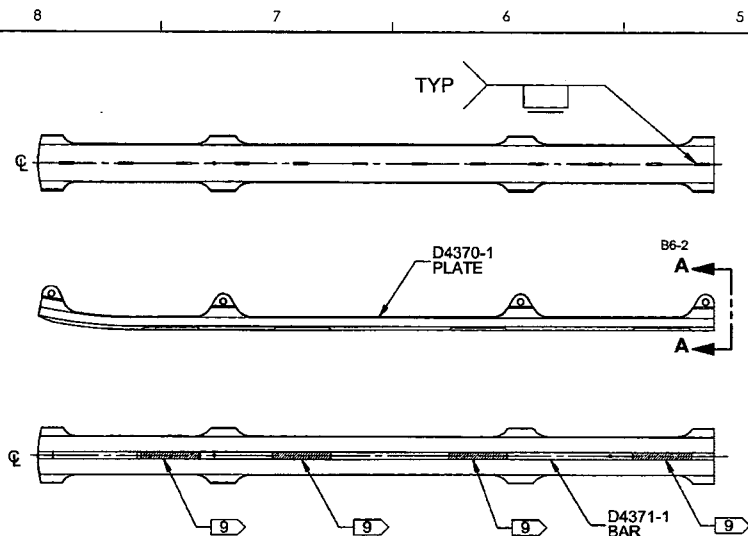
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Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

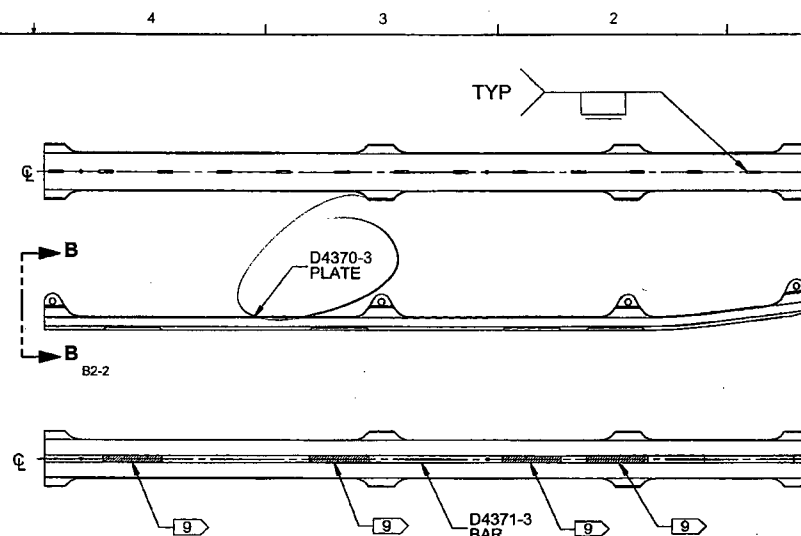
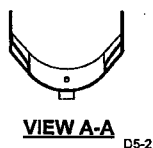
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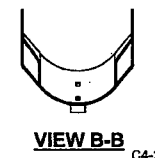
NOTE: Date & initial all entries



**D4370-041 FWD WEARPLATE ASSY**



**D4370-043 AFT WEARPLATE ASSY**



*W/O 08408*

**PRELIMINARY  
ISSUE**

**NOTES:**

- 1) MATERIAL: N/A
- 2) FINISH: NONE
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: N/A
- 6) IDENTIFICATION: IDENTIFY WITH DART P/N "D4370-04X" PER QSI 044 6.1
- 7) WEIGHT: D4370-041 = 4.41 lbs; D4370-043 = 4.89 lbs
- 8) WELDING: PER QSI 004
- 9) 2059B HARDCOAT WELD, 0.19 THICK X 0.50 WIDE, FLUSH WITH D4371-X BAR ON ALL 3 SURFACES
- 10) AFTER FINISH, COAT ENTIRE TOP (CONCAVE) SURFACE WITH A LAYER OF SIKAFLEX-241-291 OR PROSEAL 890 OR PROSEAL 1422 OR MIL-S-8802 CLASS B SEALANT OR PLUS ONE ROCKGUARD 4714, 0.020-0.040 THICK

DESIGN	SC	<b>DART AEROSPACE USA, INC.</b>	
DRAWN	SC	PORT HADLOCK, WA	
CHECKED		DRAWING NO.	REV. PA1
MFG. APPR.		<b>D4370</b>	SHEET 2 OF 5
APPROVED		TITLE	SCALE
DE APPR.		<b>WEARPLATE ASSY</b>	NTS
DATE	11.03.24	<small>COPYRIGHT © 2011 BY DART AEROSPACE USA INC. THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE USA INC.</small>	

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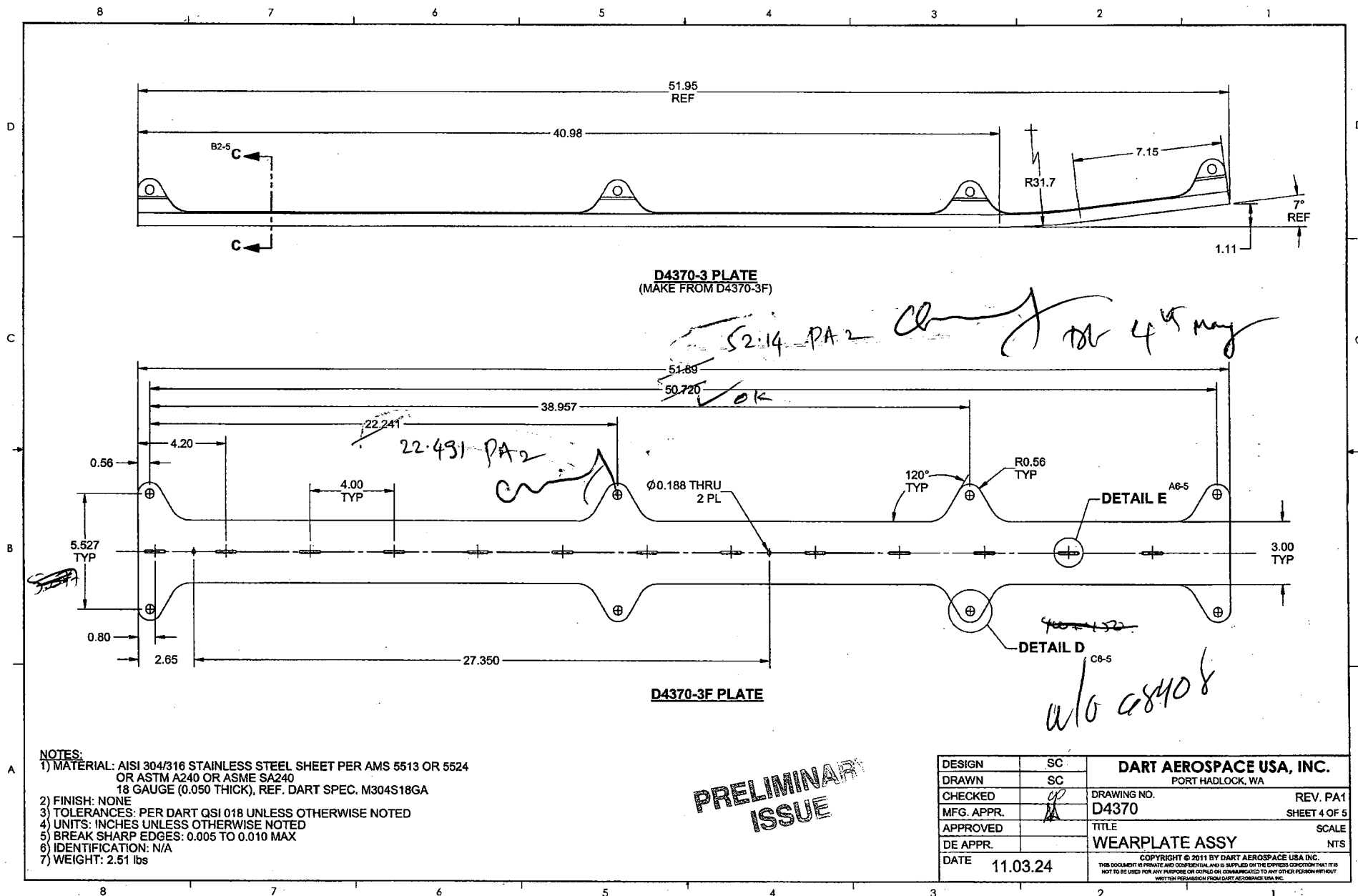
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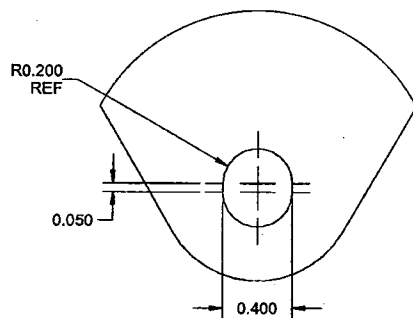
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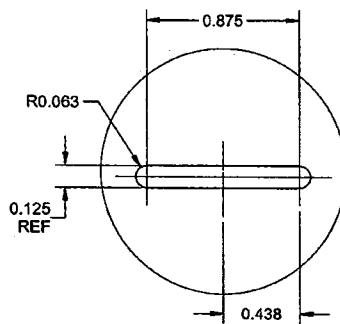
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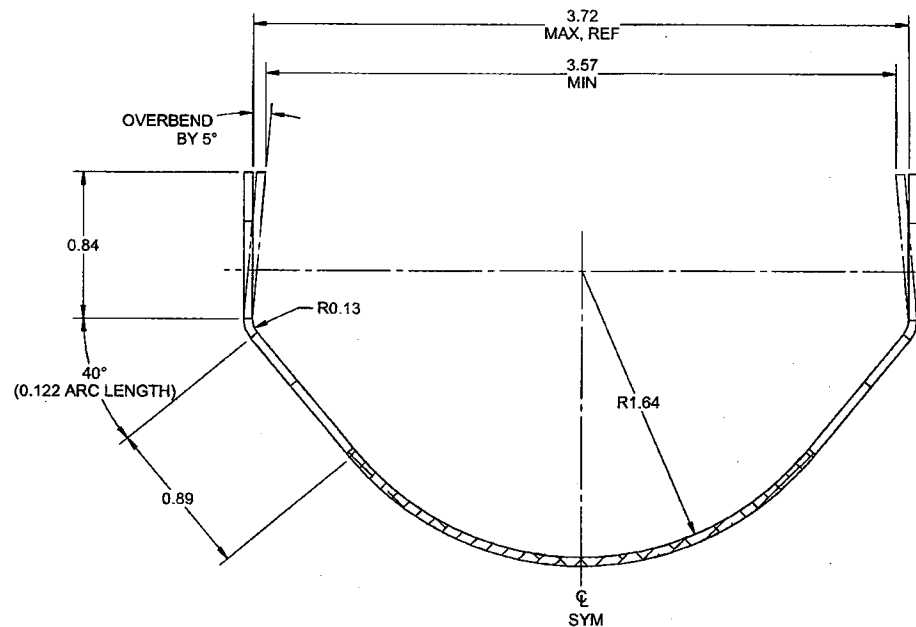
**DETAIL D**  
SLOT DETAIL TYP

B3-3  
B2-4



**DETAIL E**  
SLOT DETAIL TYP

B5-3  
B1-4



**SECTION C-C**

D3-3  
D7-4

*w/o 68408*

**PRELIMINARY  
ISSUE**

DESIGN	SC	<b>DART AEROSPACE USA, INC.</b>	
DRAWN	SC	PORT HADLOCK, WA	
CHECKED	<i>JP</i>	DRAWING NO.	REV. PA1
MFG. APPR.	<i>JP</i>	<b>D4370</b>	SHEET 5 OF 5
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DART AEROSPACE LTD		Work Order: 68468
Description: AFT WEARPLATE ASSEMBLY		Part Number: R4370-043
Inspection Dwg: D4370-3, Rev: PA1		Page 1 of 1

### FIRST ARTICLE INSPECTION CHECKLIST

☒ First Article ☒ Prototype

Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
.400	$\pm .00$	.404	X		VH302	
.125	$\pm .010$	.127	X		V	
.875	$\pm .010$	.875	X		V	
.56	$\pm .030$	.557	X		V	
.180	$\pm .030$	.180	X		V	
2.65	$\pm .030$	2.648	X		V	
4.20	$\pm .030$	4.20	X		V	
4.00	$\pm .030$	4.003	X		V	
3.00	$\pm .030$	3.008	X		V	
Ø .188	$\pm .005 - .001$	.193	X		V	
5.527	$\pm .010$	5.530	X		V	
27.350	$\pm .010$	27.350	X		T	
22.241	$\pm .010$	22.241	X		T	
38.957	$\pm .010$	38.957	X		T	
50.720	$\pm .010$	50.720	X		T	
51.89	$\pm .030$	51.89	X		T	
.050	$\pm .010$	.048	X		V	

Measured by: KB	Audited by: S	Prototype Approval:
Date: 11-4-19	Date: 11/04/19 inspected to PA1 Dwg	Date:
Rev A	Date	Change
		New Issue
Revised by	Approved	
KJ/JLM		